



# **Grade 7**

## **Sample Released Questions**

### **January 2004**

This document contains released questions from the Kentucky Core Content Test. These questions are presented in the new test format that will be used for the 2004 KCCT. You will notice some design changes. Students will be marking their answers to multiple-choice questions and writing their answers to open-response questions directly in the test booklet. Blank pages have been included where necessary so that each open-response question is facing the page on which students are to write their response. The number of items in this document does not necessarily match the number of items that will appear in the actual test booklets.

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*The following is the general guide that will be used to evaluate your responses to the open-response questions in this test.*

## KENTUCKY GENERAL SCORING GUIDE

<b>SCORE POINT 4</b>	<ul style="list-style-type: none"><li>• You complete all important components of the question and communicate ideas clearly.</li><li>• You demonstrate in-depth understanding of the relevant concepts and/or processes.</li><li>• Where appropriate, you choose more efficient and/or sophisticated processes.</li><li>• Where appropriate, you offer insightful interpretations or extensions (generalizations, applications, analogies).</li></ul>
<b>SCORE POINT 3</b>	<ul style="list-style-type: none"><li>• You complete most important components of the question and communicate clearly.</li><li>• You demonstrate an understanding of major concepts even though you overlook or misunderstand some less-important ideas or details.</li></ul>
<b>SCORE POINT 2</b>	<ul style="list-style-type: none"><li>• You complete some important components of the question and communicate those components clearly.</li><li>• You demonstrate that there are gaps in your conceptual understanding.</li></ul>
<b>SCORE POINT 1</b>	<ul style="list-style-type: none"><li>• You show minimal understanding of the question.</li><li>• You address only a small portion of the question.</li></ul>
<b>SCORE POINT 0</b>	<ul style="list-style-type: none"><li>• Your answer is totally incorrect or irrelevant.</li></ul>
<b>BLANK</b>	<ul style="list-style-type: none"><li>• You did not give any answer at all.</li></ul>



## Grade 7

## Reading

### WHEN ANSWERING QUESTIONS IN THIS TEST BOOKLET



CORRECT MARK



INCORRECT MARKS



- Use only soft black lead pencil (No. 2).
- Do NOT use ink or ball point pen.
- When marking your answers to multiple-choice questions, make heavy, dark marks that completely fill the circle. Mark only one answer for each question.
- Erase completely any marks you wish to change.
- Make NO STRAY marks on any page of your test booklet.
- For the open-response questions, be sure you write your answers on the lines and in the spaces provided. Answers or parts of answers written outside the boxed areas cannot be scored.

# READING

This test section contains four reading selections with a total of sixteen multiple-choice and four open-response (short-answer) questions. Please mark your answer for each multiple-choice question by filling in the circle completely for the correct answer. Mark only one answer for each question. If you do not know the answer, make your best guess.

*The story you are about to read is an excerpt from Gary Paulsen's book, Brian's Winter. Brian is the only survivor of a plane that crashed in the Canadian wilderness. Read about an exciting adventure Brian had with a bear. Then answer the questions that follow.*

## BRIAN'S WINTER

He didn't know the time but somewhere in the middle of the night he awakened suddenly. He had come to rely on his senses and he knew something had changed to snap him awake that way and he lay with his eyes wide in the dark, listening, smelling, trying to see.

He did not have long to wait.

There was a soft rustle, then a whoofing sound and the whole wall of the shelter peeled away from the rock as if caught in an earthquake, away and down and Brian—still in his bag—was looking up in the dark at the enormous form of a bear leaning over him.

There was no time to react, to move, to do anything.

Meat, Brian had time to think—he's smelled the venison and come for it. He's come for the mea—

And it was true. The bear had come for the meat but the problem was that Brian lay between the bear and the meat, and the bear cuffed him to the side. As it was it wasn't much of a cuff—nowhere near what the bear could have done, which would have broken Brian's legs—but the bag was zipped and Brian became tangled in it and couldn't move fast enough to stay out of the way so the bear hit him again.

This time hard. The blow took Brian in the upper thigh and even through the bag it was solid enough to nearly dislocate his hip.

He cried out. "Ahhhh . . ."

The bear stopped dead in the darkness. Brian could see the head turn to look back and down at him, a slow turning, huge and full of threat, and the bear's breath washed over him and he thought I am going to die now. All this that I have done and I'm going to die because a bear wants to eat and I am in the way. He could see the bear's teeth as it showed them and he couldn't, simply couldn't do anything; couldn't move, couldn't react. It was over.

The bear started to move down toward Brian and then hesitated, stopped and raised its head again and turned to look back over its shoulder to the left.

Half a beat and Brian lay still, staring up at the bear. But now a new smell, over the smell of the bear; a rank, foul, sulfurous and gagging smell as the bear turned and took a full shot of skunk spray directly in the eyes.

Betty had arrived. Whether she'd just been out hunting and had come back or had been awakened and surprised or simply didn't like bears very much—whatever the reason she had dumped a full load in the bear's face.

The effect was immediate and devastating.

*“Rowwrrrmph!”*

The bear seemed to turn inside itself, knocking Brian farther to the side, and rolled backward out of the shelter area, slamming its head back and forth on the ground, trying to clear its eyes, hacking and throwing up as it vanished in the night.

Brian looked to the source of all this. Betty stood near the end of the shelter, still with her tail raised, only now aimed at Brian. She twitched it once, then again, and Brian shook his head.

“I’m sorry. I just didn’t think you’d be thinking of food . . .” He took a piece of meat from the pile—a big one—and tossed it to her and she lowered her tail, picked up the meat and waddled off into the dark in the direction of her burrow.

Brian lay back in his bag. His shelter was a mess, the wall tipped over, and his hip hurt, but it wasn’t raining and the bag was warm. He could fix things up in the morning.

The stink of skunk was everywhere—much of what Betty had shot at the bear had gone around it and hit the wall—but Brian didn’t mind. In fact, he thought, I’ve grown kind of fond of it. I’ll have to make sure to give her extra food. It was like having a pet nuclear device.

He went to sleep smiling.

**Mark your answer choices for multiple-choice questions 1 through 4 in the spaces provided.**

1. The bear came into the shelter to
  - ☐ hurt Brian.
  - ☐ find berries.
  - ☐ hide from Betty.
  - ☐ get venison.
  
2. In the beginning of the story the author writes, “the bear cuffed him....” What does the word cuffed mean?
  - ☐ bit
  - ☐ turned
  - ☐ hit
  - ☐ carried
  
3. This story is based on the conflict of
  - ☐ person versus person.
  - ☐ person versus society.
  - ☐ person versus self.
  - ☐ person versus nature.
  
4. Which animal sense is shown the **most** in this passage?
  - ☐ smell
  - ☐ sight
  - ☐ hearing
  - ☐ taste

**Turn the page and continue  
with the next question →**

**Read all parts of the question before you begin. Write your answer to open-response question 5 in the space provided on the next page.**

5. This passage from *Brian's Winter* tells the story of an adventure in the wilderness.
- Identify **two** events that are described in the passage.
  - Compare the feelings that Brian had during each of these events. Use details from the passage to support your answer.

**Do not write on this page. Please write your answer to this open-response question on the next page. 🖐️**



**READING**

5.

*Have you ever thought about entering a sweepstakes contest? Read the article, “the sneaky sell,” to discover some interesting facts about sweepstakes. Then answer the questions that follow.*

## the sneaky sell

### Sweepstakes Surprises

Imagine shooting hoops with Michael Jordan! That was the top prize in McDonald’s *NBA Fantasy* sweepstakes. Other recent sweepstakes prizes: a visit to the set of *90210* (from Hi-C), a week at Disney World (from Quaker Oatmeal). But before you buy a product just to try for a cool prize, check out these surprises.

❑ **You can try to win for free.** Companies hope you’ll buy their product to enter their sweepstakes. But you can write for a *free* entry form without buying anything. As long as it’s just a matter of *chance* whether you win, companies can’t make you buy stuff to enter a sweepstakes. Of course, you need super eyes to learn where to write. The address for free forms is usually in tiny letters.

Are you more likely to win if you buy the product? No, that’s against the law. “We keep all entries in the same pile,” said a cereal company official. “You have just as good a chance of winning if you don’t buy the product.”

❑ **Look-alikes.** Products that have sweepstakes are often ones where there are several brands that are very much alike. For example, there are so many cereals it’s hard for one to stand out. Companies use sweepstakes to make a cereal *seem* different. “People might be persuaded by a neat sweepstakes prize to try our cereal instead

of another,” said a cereal official. The same goes for other look-alike products (sodas, fruit drinks, fast food). But an ad expert said: “If companies need a prize to keep a product selling, they should change the product.”

❑ **They want your address.** If you send in an entry form, you may get mail you didn’t expect. Companies figure people who enter their sweepstakes are interested in their products. Some companies then mail ads about their other products to those people.

❑ **Likely to win? NOT!** TV ads for Hi-C’s *90210* sweepstakes made a big deal about winning that visit to the *90210* set. The ad said: “Thousands will enter. Hundreds will win great prizes.” That made Virginia angry: “There’s only *one* Grand Prize (the visit to the set). Only *one* person will win that.” The “hundreds” of winners mentioned in the ad will win a poster or CD.

McDonald’s said only one person out of 75 million would win its top prize and go one-on-one with Mike. That’s about how many kids under age 19 live in the U.S. — 75 million. It’s as if only *one* kid in the whole country had a chance to win that prize. The prize you were most likely to win? A sticker worth \$2.

❑ **Taxes.** If you win a \$2 sticker, don’t worry. But win big and you may owe income tax. Prizes are income. Companies have to tell the government the names of big winners and what the prizes are worth. That trip to meet Michael Jordan is worth about \$8,000. A 12-year-old with no other income who won that prize might owe \$600 in taxes. Surprise!

**Mark your answer choices for multiple-choice questions 6 through 9 in the spaces provided.**

6. The article “the sneaky sell” suggests that sweepstakes
- ☐ are only won by people who buy the advertised products.
  - ☐ award grand prizes to hundreds of winners.
  - ☐ discourage people from using a featured product.
  - ☐ have entry forms that should be read carefully.
7. According to the article, some sweepstakes prizes may not be free because
- ☐ prizes are considered income and taxes sometimes must be paid on them.
  - ☐ people are required to purchase unnecessary products in order to enter.
  - ☐ companies who sponsor sweepstakes drawings raise the prices of their products.
  - ☐ prizes are not given away, but are sold at reduced prices.
8. The purpose of using boldfaced print in the article is to help make
- ☐ the article organized and easy to follow.
  - ☐ the article seem more important.
  - ☐ these words take up less space.
  - ☐ these words easy to understand.
9. If every teenager in America entered a nationwide sweepstakes contest, what are the chances one of them would win the top prize?
- ☐ one in many hundreds
  - ☐ one in a million
  - ☐ one in many millions
  - ☐ one in a billion

**Write your answer to open-response question 10 in the space provided on the next page.**

10. This article offers guidelines to help people make wiser decisions about entering sweepstakes. Select **three** important ideas from this article and explain how each one could help people make wiser decisions about entering sweepstakes. Fully explain your answer using examples from the article.

**Do not write on this page. Please write your answer to this open-response question on the next page. 🖐️**

**READING**

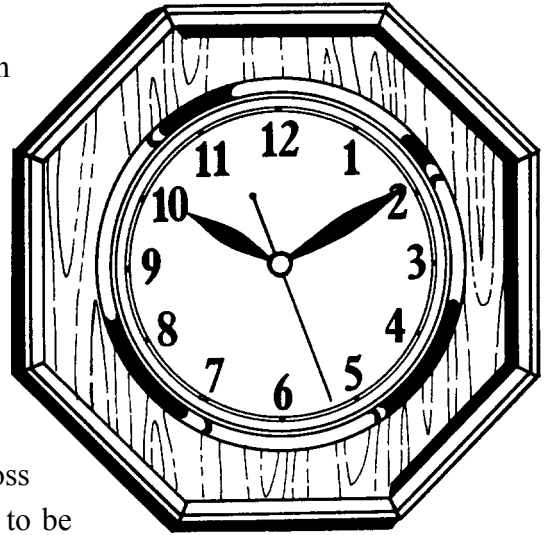
10.

*Do you use dial or digital clocks? Isaac Asimov believes there are reasons to prefer one kind of clock to the other. Read why he is concerned about the use of digital clocks. Then answer the questions that follow.*

## Dial Versus Digital

*Isaac Asimov*

There seems no question but that the clock dial, which has existed in its present form since the seventeenth century and in earlier forms since ancient times, is on its way out. More and more common are the digital clocks that mark off the hours, minutes, and seconds in ever-changing numbers. This certainly appears to be an advance in technology. You will no longer have to interpret the meaning of “the big hand on the eleven and the little hand on the five.” Your digital clock will tell you at once that it is 4:55. And yet there will be a loss in the conversion of dial to digital, and no one seems to be worrying about it.



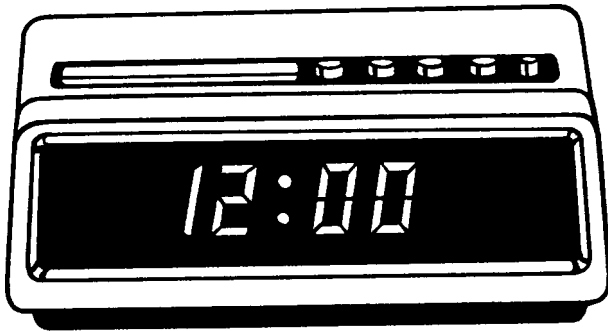
When something turns, it can turn in just one of two ways, clockwise or counterclockwise, and we all know which is which. Clockwise is the normal turning direction of the hands of a clock and counterclockwise is the opposite of that. Since we all stare at clocks (dial clocks, that is), we have no trouble following directions or descriptions that include those words. But if dial clocks disappear, so will the meaning of those words for anyone who has never stared at anything but digitals. There are no *good* substitutes for clockwise and counterclockwise. The nearest you can come is by a consideration of your hands. If you clench your fists with your thumbs pointing at your chest and then look at your fingers, you will see that the fingers of your right hand curve counterclockwise from knuckles to tips while the fingers of your left hand curve clockwise. You could then talk about a “right-hand twist” and a “left-hand twist,” but people don’t stare at their hands the way they stare at a clock, and this will never be an adequate replacement.

Nor is this a minor matter. Astronomers define the north pole and south pole of any rotating body in such terms. If you are hovering above a pole of rotation and the body is rotating counterclockwise, it is the north pole; if the body is rotating clockwise, it is the south pole. Astronomers also speak of “direct motion” and “retrograde motion,” by which they mean counterclockwise and clockwise, respectively.

Here is another example. Suppose you are looking through a microscope at some object on a slide or through a telescope at some view in the sky. In either case, you might wish to point out something to a colleague and ask him or her to look at it, too. “Notice that object

at eleven o'clock," you might say—or five o'clock or two o'clock. Everyone knows exactly where two, five, or eleven—or any number from one to twelve—is located on the clock dial, and can immediately look exactly where he is told. (In combat, pilots may call attention to the approach of an enemy plane or the location of antiaircraft bursts or the target, for that matter, in the same way.)

Once the dial is gone, location by "o'clock" will also be gone, and we have nothing to take its place. Of course, you can use directions instead: "northeast," "southwest by south," and so on. However, you will have to know which direction is north to begin with. Or, if you are arbitrary and decide to let north be straight ahead or straight up, regardless of its real location, it still remains true that very few people are as familiar with a compass as with a clock face.



Here's still another thing. Children learn to count and once they learn the first few numbers, they quickly get the whole idea. You go from 0 to 9, and 0 to 9, over and over again. You go from 0 to 9, then from 10 to 19, then from 20 to 29, and so on till you reach 90 to 99, and then you pass on to 100. It is a very systematic thing and once you learn it, you never forget it. Time is different! The early Sumerians couldn't handle fractions very well, so they chose 60 as their base because it can be divided evenly in a number of ways. Ever since, we have continued to use the number 60 in certain applications, the chief one being the measurement of time. Thus, there are 60 minutes in an hour.

If you are using a dial, this doesn't matter. You simply note the position of the hands and they automatically become a measure of time: "half past five," "a quarter past three," "a quarter to ten," and so on. You see time as space and not as numbers. In a digital clock, however, time is measured *only* as numbers, so you go from 1:01 to 1:59 and then move directly to 2:00. It introduces an irregularity into the number system that is going to insert a stumbling block, and an unnecessary one, into education. Just think: 5.50 is halfway between 5 and 6 if we are measuring length or weight or money or anything but time. In time, 5:50 is nearly 6, and it is 5:30 that is halfway between 5 and 6.

What shall we do about all this? I can think of nothing. There is an odd conservatism among people that will make them fight to the death against making time decimal and having a hundred minutes to the hour. And even if we do convert to decimal time, what will we do about "clockwise," "counterclockwise," and locating things at "eleven o'clock"? It will be a pretty problem for our descendants.

**Mark your answer choices for multiple-choice questions 11 through 14 in the spaces provided.**

11. The Sumerians chose 60 as the base for their number system because
- ☐ there are 60 minutes in an hour.
  - ☐ they invented dial clocks.
  - ☐ 60 can be divided easily.
  - ☐ there were six sacred directions on the Sumerian compass.
12. The author says that using dial references when viewing objects under a microscope helps to show the
- ☐ position of an object.
  - ☐ time that the object is observed.
  - ☐ frequency of appearance of the object.
  - ☐ duration of time that the object is evident.
13. Which feature of a dial clock do astronomers use to define Earth's rotation?
- ☐ its numbering system
  - ☐ its direction of hand movement
  - ☐ its relationship to a compass
  - ☐ its movement over time
14. The author concludes that in the future
- ☐ only scientists will use dial clocks.
  - ☐ new clock terms will be invented.
  - ☐ the clock problem will continue.
  - ☐ children will learn to count differently.



**Turn the page and continue  
with the next question →**

**Write your answer to open-response question 15 in the space provided on the next page.**

15. Discuss **three** arguments that the author uses in trying to convince the reader that dial clocks are better than digital clocks.

**Do not write on this page. Please write your answer to this open-response question on the next page. 🖐️**

## READING

15.

*Remembering information can be easy with a few helpful techniques. Read the article “Memory: Magic through Association” to learn some of these techniques. Then answer the questions that follow.*

## **Memory: Magic through Association**

REPETITION AND REVIEW are powerful ways to burn information into your memory. Adding another technique—association—can make memorizing even easier and more fun.

Following are some ways to use association. You may find that some techniques work better for you than others. As always, experiment.

### ♦ *CONNECT THE MATERIAL TO YOUR INTERESTS*

We tend to remember material that aligns with our interests. If the subject you’re learning seems outside your interests, then search for an interesting connection. For example, perhaps you can relate American history to the development of jazz and rock music. Someone who loves cars can connect several areas in physics to automobiles.

### ♦ *GO FOR UNDERSTANDING*

It’s usually easier to remember material that you understand. It’s easier for a baseball fan to remember the scores of today’s games than it is for someone who doesn’t know the difference between home base and a home run. So before you start to memorize something, do whatever it takes for you to understand it. Talk to another student. See your teacher. Review that material with a parent or family member. Know what problem this material helps you solve, and ask how you would apply this material outside of class. Go for the big picture. Understand the rules before the exceptions. Organize the material by outlining or drawing a mind map. Understanding is especially important in math and science, where it’s easy to confuse formulas and how to apply them.

### ♦ *USE MNEMONICS*

This word is pronounced as though it were spelled nemoniks. A mnemonic is a play on words that helps you to remember something. The following jingles offer examples: Thirty days have September, April, June and November. All the rest have 31, except for February, the second one. . . “i” before “e” except after “c,” or when sounded like “a” as in “neighbor” and “weigh.” Remember that you can make up your own poem, rap, or jingle.

### ♦ *SET A MEMORY TRAP*

Say that it’s Monday and you want to remember to call your Aunt Margaret on Tuesday. So, tie a string around your little finger. At the same time, make a mental note: Tomorrow, when I see this string on my finger, that will remind me to call my Aunt.

During Tuesday morning’s shower, you might notice a long white hair growing out of your hand. You try to pluck it out and you’ll discover it’s actually the string you tied to yourself on Monday. Yo, you say to yourself, as soon as I’m dry it’s time to get on the horn. There are hundreds of other ways to set memory traps. Instead of tying a string to

your finger, switch your watch to the other wrist. Tie a rubber band around your wrist. Move a ring to a different finger. Or set an alarm as a cue to do something; many wrist watches offer this feature.

♦ *USE ACRONYMS*

An acronym is a word formed by the first letters in a series of other words. For example, NASA is an acronym for the National Aeronautics and Space Administration. Another acronym is the word HOMES, used to remember the names of the Great Lakes: Huron, Ontario, Michigan, Erie, Superior. Again, there's no need to stick with the old standbys. You can create your own acronyms.


**Mark your answer choices for multiple-choice questions 16 through 19 in the spaces provided.**

- |  |   |
|--|---|
| <p>16. The title, "Memory: Magic through Association," suggests that</p> <ul style="list-style-type: none"><li><input type="radio"/> magic is needed to remember information.</li><li><input type="radio"/> memory appears and disappears.</li><li><input type="radio"/> association can make memorizing easy and fun.</li><li><input type="radio"/> only magicians have good memories.</li></ul> <p>17. The five sections of this article are set off by statements written in large, italicized letters. What is the <b>best</b> reason for this?</p> <ul style="list-style-type: none"><li><input type="radio"/> The statements are not sentences.</li><li><input type="radio"/> The statements provide examples of reading techniques.</li><li><input type="radio"/> Each statement summarizes what has been said up to that point.</li><li><input type="radio"/> Each statement gives the main idea of the following section.</li></ul> | <p>18. The main point of the section "<i>Go for Understanding</i>" is to</p> <ul style="list-style-type: none"><li><input type="radio"/> learn the game of baseball.</li><li><input type="radio"/> talk to your friends.</li><li><input type="radio"/> understand the information before you try to memorize it.</li><li><input type="radio"/> understand the rules of a game before you try to play it.</li></ul> <p>19. What does the author say might be a good memory trap to set?</p> <ul style="list-style-type: none"><li><input type="radio"/> a written note</li><li><input type="radio"/> a coin in your shoe</li><li><input type="radio"/> a mousetrap</li><li><input type="radio"/> a string on your finger</li></ul> |
|--|---|

**Read all parts of the question before you begin. Write your answer to open-response question 20 in the space provided on the next page.**

20. The author offers many useful methods to remember information.

- a. Identify **three** methods from the article that can be used to remember information.
- b. Explain how **each** of these methods can help you to improve your memory.

**Do not write on this page. Please write your answer to this open-response question on the next page. **

## READING

20.

**DO NOT MARK ON THIS PAGE**





## Grade 7

## Science

### WHEN ANSWERING QUESTIONS IN THIS TEST BOOKLET



CORRECT MARK



INCORRECT MARKS



- Use only soft black lead pencil (No. 2).
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# SCIENCE

Please mark your answer for each multiple-choice question by filling in the circle completely for the correct answer. Mark only one answer for each question. If you do not know the answer, make your best guess.

1. Color, volume, and density are
  - ☐ properties of solids and liquids only.
  - ☐ chemical properties.
  - ☐ properties of solids only.
  - ☐ physical properties.
  
2. An earthquake occurs when the tectonic plates below Earth's surface suddenly shift. These shifts of the tectonic plates are caused by
  - ☐ movements in Earth's core.
  - ☐ movements in Earth's mantle.
  - ☐ deposition of sediments.
  - ☐ eruption of volcanoes.
  
3. We get energy from the food we eat. The energy in the food first comes from the
  - ☐ soil.
  - ☐ fertilizers used by farmers.
  - ☐ sun.
  - ☐ vitamins added by food manufacturers.

**Turn the page and continue  
with the next question →**

# SCIENCE OPEN-RESPONSE QUESTIONS

Read all parts of each open-response question before you begin. Write your answers to the open-response questions in the space provided in this test booklet.

**Write your answer to question 4 in the space provided on the next page.**


## *Newton's Laws of Motion*

4. The brakes on a truck fail as it approaches a car stopped at a red light. Use Newton's first two laws of motion to explain what will happen when the truck collides with the car.

### **Newton's Laws of Motion**

**1st Law:** An object will stay in place until it is pushed or pulled; an object that is moving will keep moving in a straight line until it is pushed or pulled to change its speed and/or direction.

**2nd Law:** The more an object is pushed or pulled, the faster its speed and/or direction changes; the more massive an object is, the more resistance it has to change its speed and/or direction.

**Do not write on this page. Please write your answer to this open-response question on the next page. **

**SCIENCE**

4.

**Write your answer to question 5 in the space provided on the next page.**

*Changes in Landforms*

5. Scientists have evidence that the landforms we see on Earth, such as mountains, islands, and canyons, as well as the shapes of continents, are the result of constructive and destructive forces at work over a long period of time.

Describe in detail **two** pieces of evidence that show that landforms on Earth are constantly changing. Provide a specific example for each piece of evidence.

**Do not write on this page. Please write your answer to this open-response question on the next page. 🖱️**

**SCIENCE**

5.

**Write your answer to question 6 in the space provided on the next page.**

*Extinction*

6. A species may become extinct if environmental changes occur and the species does not adapt quickly enough to the changes.
- Identify an environmental change that might cause a species to become extinct **and** identify a species that would likely be affected by such a change.
  - Describe how extinction of one species can affect other organisms in the ecosystem.

**Do not write on this page. Please write your answer to this open-response question on the next page. 🖐️**



## SCIENCE

6.

**DO NOT MARK ON THIS PAGE**



## Grade 7

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## Writing

### GENERAL DIRECTIONS

This part of the test contains two writing tasks. Read the two writing tasks carefully. Choose only ONE of the tasks to complete.

You will have 90 minutes to complete this task. You may not work or confer with anyone.

- Think about what you want to write.
- Use a prewriting/planning activity such as making notes, outlining, webbing, mapping, clustering, or brainstorming on paper provided by your teacher.
- Write a draft on paper provided by your teacher.
- Revise and edit your draft. You may use a dictionary and/or thesaurus.

Write the FINAL copy in your test booklet using a #2 pencil.

These criteria will be used to score your work.

<b>SCORING CRITERIA FOR ON-DEMAND WRITING</b>	
<b>PURPOSE/AUDIENCE:</b> The degree to which the writer maintains a focused purpose to communicate with an audience by:	<ul style="list-style-type: none"><li>• narrowing the topic to establish a focus</li><li>• analyzing and addressing the needs of the intended audience</li><li>• adhering to the characteristics (e.g., format, organization) of the form</li><li>• employing a suitable tone</li><li>• allowing a voice to emerge when appropriate</li></ul>
<b>IDEA DEVELOPMENT/SUPPORT:</b> The degree to which the writer develops and supports main ideas and deepens the audience’s understanding by using:	<ul style="list-style-type: none"><li>• logical, justified, and suitable explanation</li><li>• relevant elaboration</li><li>• related connections and reflections</li><li>• idea development strategies (e.g., bulleted lists, definitions) appropriate for the form</li></ul>
<b>ORGANIZATION:</b> The degree to which the writer creates unity and coherence to accomplish the focused purpose by:	<ul style="list-style-type: none"><li>• engaging the audience and establishing a context for reading</li><li>• placing ideas and support in a meaningful order</li><li>• guiding the reader through the piece with transitions and transitional elements</li><li>• providing effective closure</li></ul>
<b>SENTENCES:</b> The degree to which the writer creates effective sentences that are:	<ul style="list-style-type: none"><li>• varied in structure and length</li><li>• constructed effectively</li><li>• complete and correct</li></ul>
<b>LANGUAGE:</b> The degree to which the writer demonstrates:	<ul style="list-style-type: none"><li>• word choice<ul style="list-style-type: none"><li>» strong verbs and nouns</li><li>» concrete and/or sensory details</li><li>» language appropriate to the content, purpose, and audience</li></ul></li><li>• concise use of language</li><li>• correct usage/grammar</li></ul>
<b>CORRECTNESS:</b> The degree to which the writer demonstrates:	<ul style="list-style-type: none"><li>• correct spelling</li><li>• correct punctuation</li><li>• correct capitalization</li></ul>

Choose only ONE of the following writing tasks to complete.

## WRITING TASK 4

### SITUATION:

Not only do games have rules, but there are also rules of respect and safety at home and at school. These rules help everyone understand what to do, how and when to do the activities, and how to be safe. Think of a time that you needed to know the rules for an activity. What happened? Why were the rules important? Could someone else learn from your experience? Your school newspaper is running a series of first-person articles about lessons students have learned.

### WRITING TASK:

In an article for your school newspaper, tell about a time when knowing the rules was important.

OR

## WRITING TASK 11

### SITUATION:

A Crayola museum? A Cockroach Hall of Fame? A museum to honor the Tooth Fairy? All of these are real museums in the United States that display unusual items. Think of an object that you would like to see honored with its own museum.

### WRITING TASK:

Write a letter to convince the editor of *Interesting Museums Magazine* that your selection would be of interest to museum visitors. Include information about some items that might be displayed in this unusual museum.

## WRITING

**Use a #2 pencil to fill in the circle that shows the number of the writing task that you have chosen.**

## TASK

A diagram showing two circles, each containing a number. The left circle contains the number '1' and the right circle contains the number '2'. Both circles are enclosed within a single rectangular frame.

[illegible]









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# SCORING INFORMATION FOR READING

For each multiple-choice question, this section provides the correct answer, the Academic Expectation(s) and Code(s) from the Core Content for Assessment that the question addresses, and the percentage of test takers who answered the item correctly. For each open-response question, this section provides the Academic Expectation(s) and Code(s) from the Core Content for Assessment that the question addresses, the percentage of test takers who scored at each score point, and a scoring guide describing expectations for performance at each score point.

## *Brian's Winter*

1. The bear came into the shelter to
- ☐ hurt Brian.
  - ☐ find berries.
  - ☐ hide from Betty.
  - ☒ get venison.

**Primary Academic Expectation:** 1.2 “Students make sense of the variety of materials they read.”

**Primary Core Content Code:** 1.0.006 “Scan to find key information.”

Percentage of test takers who answered this item correctly in 2001: 68

2. In the beginning of the story the author writes, “the bear cuffed him....” What does the word cuffed mean?
- ☐ bit
  - ☐ turned
  - ☒ hit
  - ☐ carried

**Primary Academic Expectation:** 1.2 “Students make sense of the variety of materials they read.”

**Primary Core Content Code:** 1.0.002 “Use knowledge of synonyms, antonyms, and homonyms to comprehend a passage.”

Percentage of test takers who answered this item correctly in 2001: 75

3. This story is based on the conflict of
- ☐ person versus person.
  - ☐ person versus society.
  - ☐ person versus self.
  - ☒ person versus nature.

**Primary Academic Expectation:** 1.2 “Students make sense of the variety of materials they read.”

**Primary Core Content Code:** 1.0.015 “Explain how a conflict in a passage is resolved.”

**Secondary Academic Expectation:** 1.2 “Students make sense of the variety of materials they read.”

**Secondary Core Content Code:** 1.0.013 “Describe literary elements (e.g., characterization, setting, plot, theme, point of view) in a passage.”

Percentage of test takers who answered this item correctly in 2001: 91

4. Which animal sense is shown the **most** in this passage?
- ☒ smell
  - ☐ sight
  - ☐ hearing
  - ☐ taste

**Primary Academic Expectation:** 1.2 “Students make sense of the variety of materials they read.”

**Primary Core Content Code:** 1.0.008 “Make predictions, draw conclusions, and make generalizations about what is read.”

Percentage of test takers who answered this item correctly in 2001: 79

5. This passage from *Brian's Winter* tells the story of an adventure in the wilderness.
- Identify **two** events that are described in the passage.
  - Compare the feelings that Brian had during each of these events. Use details from the passage to support your answer.

**Primary Academic Expectation:** 1.2 “Students make sense of the variety of materials they read.”

**Primary Core Content Code:** 1.0.014 “Analyze the relationship between events in a story and a character’s behavior.”

**Secondary Academic Expectation:** 1.2 “Students make sense of the variety of materials they read.”

**Secondary Core Content Code:** 1.0.009 “Reflect on and evaluate what is read.”

Percentage of test takers in 2001 who received

a score of 4: 3

a score of 3: 21

a score of 2: 49

a score of 1: 24

a score of 0: 2

Percentage of blank responses: 1

## *Brian's Winter*

### Scoring Guide

SCORE	DESCRIPTION
4	Student identifies two events from the passage and clearly compares the feeling that Brian had during each of these events. Student uses details from the passage to clearly support the answer.
3	Student identifies two events from the passage and generally compares the feeling that Brian had during each of these events. Student uses details from the passage to generally support the answer.
2	Student identifies two events from the passage and gives a limited comparison of Brian's feelings during each of these events.
1	Student demonstrates minimal understanding (e.g., student identifies an event and/or feeling(s) from the passage).
0	Student's response is totally incorrect or irrelevant.
Blank	No student response.

#### **Examples of Events:**

Brian woke up suddenly.  
Bear appeared.  
Bear hit Brian.  
Brian cried out.  
Betty arrived.  
Betty sprayed the bear.  
Bear rolled backwards.  
Brian rewarded Betty with meat.  
Brian lay back in his sleeping bag.  
Brian went to sleep.

#### **Examples of feelings:**

Lonely  
Scared  
Warm and comfortable  
Surprised  
Afraid  
Pain  
Relief  
Confident  
Back in control  
Safe  
Thankful  
Proud  
Grateful

### *The Sneaky Sell*

6. The article “the sneaky sell” suggests that sweepstakes
- ☐ are only won by people who buy the advertised products.
  - ☐ award grand prizes to hundreds of winners.
  - ☐ discourage people from using a featured product.
  - ☒ have entry forms that should be read carefully.

**Primary Academic Expectation:** 1.2 “Students make sense of the variety of materials they read.”

**Primary Core Content Code:** 2.0.008 “Make predictions, draw conclusions, and make generalizations about what is read.”

Percentage of test takers who answered this item correctly in 2003: 49

7. According to the article, some sweepstakes prizes may not be free because
- ☒ prizes are considered income and taxes sometimes must be paid on them.
  - ☐ people are required to purchase unnecessary products in order to enter.
  - ☐ companies who sponsor sweepstakes drawings raise the prices of their products.
  - ☐ prizes are not given away, but are sold at reduced prices.

**Primary Academic Expectation:** 1.2 “Students make sense of the variety of materials they read.”

**Primary Core Content Code:** 2.0.013 “Identify supporting details and explain their importance in a passage.”

Percentage of test takers who answered this item correctly in 2003: 80

8. The purpose of using boldfaced print in the article is to help make
- the article organized and easy to follow.
  - the article seem more important.
  - these words take up less space.
  - these words easy to understand.

**Primary Academic Expectation:** 1.2 “Students make sense of the variety of materials they read.”

**Primary Core Content Code:** 2.0.011 “Use text features (e.g., lists, charts, graphs, tables of contents, indexes, glossaries, captions, diagrams, headings) to understand a passage.”

**Secondary Academic Expectation:** 1.2 “Students make sense of the variety of materials they read.”

**Secondary Core Content Code:** 2.0.012 “Apply knowledge of organizational patterns (e.g., cause and effect, comparison, contrast, sequence) to understand a passage.”

Percentage of test takers who answered this item correctly in 2003: 52



9. If every teenager in America entered a nationwide sweepstakes contest, what are the chances one of them would win the top prize?
- ☐ one in many hundreds
  - ☐ one in a million
  - ☒ one in many millions
  - ☐ one in a billion

**Primary Academic Expectation:** 1.2 “Students make sense of the variety of materials they read.”

**Primary Core Content Code:** 2.0.013 “Identify supporting details and explain their importance in a passage.”

**Secondary Academic Expectation:** 1.2 “Students make sense of the variety of materials they read.”

**Secondary Core Content Code:** 2.0.010 “Connect information from a passage to students’ lives and/or real world issues.”

Percentage of test takers who answered this item correctly in 2003: 62

10. This article offers guidelines to help people make wiser decisions about entering sweepstakes. Select **three** important ideas from this article and explain how each one could help people make wiser decisions about entering sweepstakes. Fully explain your answer using examples from the article.

**Primary Academic Expectation:** 1.2 “Students make sense of the variety of materials they read.”

**Primary Core Content Code:** 2.0.014 “Analyze the relationship between events in a story and a character’s behavior.”

**Secondary Academic Expectation:** 1.2 “Students make sense of the variety of materials they read.”

**Secondary Core Content Code:** 2.0.010 “Connect information from a passage to students’ lives and/or real world issues.”

Percentage of test takers in 2003 who received

a score of 4: 4

a score of 3: 25

a score of 2: 45

a score of 1: 21

a score of 0: 4

Percentage of blank responses: 1

## *The Sneaky Sell*

### Scoring Guide

SCORE	DESCRIPTION
4	Student selects three ideas from the article and clearly explains how each idea could help people make wiser decisions about entering sweepstakes, using examples from the article as support.
3	Student selects three ideas from the article and generally explains how each idea could help people make wiser decisions about entering sweepstakes, using examples from the article as support. <b>OR</b> Student selects two ideas from the article and clearly explains how each idea could help people make wiser decisions about entering sweepstakes, using examples from the article as support.
2	Student selects two or three ideas from the article and gives a limited explanation of how each idea could help people make wiser decisions. <b>OR</b> Student selects one idea and clearly explains how it could help people make wiser decisions about entering sweepstakes, using at least one example from the article as support.
1	Student demonstrates minimal understanding (e.g., student selects one idea from the article with limited or no explanation).
0	Student's response is totally incorrect or irrelevant.
Blank	No student response.

### Examples of ideas from the article:

- You can enter a sweepstakes without buying a product.
- Look-alikes can be deceiving.
- They want your address for mailing lists.
- The chances of winning are slim—usually only one BIG winner.
- You have to pay taxes on your winnings.

### *Dial Versus Digital*

11. The Sumerians chose 60 as the base for their number system because
- ☐ there are 60 minutes in an hour.
  - ☐ they invented dial clocks.
  - ☒ 60 can be divided easily.
  - ☐ there were six sacred directions on the Sumerian compass.

**Primary Academic Expectation:** 1.2 “Students make sense of the variety of materials they read.”

**Primary Core Content Code:** 3.0.009 “Reflect on and evaluate what is read.”

**Secondary Academic Expectation:** 1.2 “Students make sense of the variety of materials they read.”

**Secondary Core Content Code:** 3.0.006 “Scan to find key information.”

Percentage of test takers who answered this item correctly in 2000: 82

12. The author says that using dial references when viewing objects under a microscope helps to show the
- ☒ position of an object.
  - ☐ time that the object is observed.
  - ☐ frequency of appearance of the object.
  - ☐ duration of time that the object is evident.

**Primary Academic Expectation:** 1.2 “Students make sense of the variety of materials they read.”

**Primary Core Content Code:** 3.0.012 “Identify an author’s opinion about a subject.”

**Secondary Academic Expectation:** 1.2 “Students make sense of the variety of materials they read.”

**Secondary Core Content Code:** 3.0.006 “Scan to find key information.”

Percentage of test takers who answered this item correctly in 2000: 60

13. Which feature of a dial clock do astronomers use to define Earth's rotation?

- ☐ its numbering system
- ☒ its direction of hand movement
- ☐ its relationship to a compass
- ☐ its movement over time

**Primary Academic Expectation:** 1.2 "Students make sense of the variety of materials they read."

**Primary Core Content Code:** 3.0.006 "Scan to find key information."

**Secondary Academic Expectation:** 1.2 "Students make sense of the variety of materials they read."

**Secondary Core Content Code:** 3.0.009 "Reflect on and evaluate what is read."

Percentage of test takers who answered this item correctly in 2000: 50

14. The author concludes that in the future

- ☐ only scientists will use dial clocks.
- ☐ new clock terms will be invented.
- ☒ the clock problem will continue.
- ☐ children will learn to count differently.

**Primary Academic Expectation:** 1.2 "Students make sense of the variety of materials they read."

**Primary Core Content Code:** 3.0.012 "Identify an author's opinion about a subject."

Percentage of test takers who answered this item correctly in 2000: 47

15. Discuss **three** arguments that the author uses in trying to convince the reader that dial clocks are better than digital clocks.

**Primary Academic Expectation:** 1.2 “Students make sense of the variety of materials they read.”

**Primary Core Content Code:** 3.0.015 “Identify the argument and supporting evidence.”

**Secondary Academic Expectation:** 1.2 “Students make sense of the variety of materials they read.”

**Secondary Core Content Code:** 3.0.016 “Identify commonly used persuasive techniques (e.g., expert opinion, statistics, testimonial, bandwagon).”

Percentage of test takers in 2000 who received

a score of 4: 11

a score of 3: 28

a score of 2: 36

a score of 1: 21

a score of 0: 4

Percentage of blank responses: 1

## *Dial Versus Digital*

### Scoring Guide

SCORE	DESCRIPTION
4	Student clearly discusses three of the arguments the author uses to try to convince the reader that dial clocks are better than digital.
3	Student generally discusses two or three of the arguments that the author uses to try to convince the reader that dial clocks are better than digital. <b>OR</b> Student clearly discusses one of the arguments that the author uses to try to convince the reader that dial clocks are better than digital.
2	Student discusses in a limited way two arguments that the author uses to try to convince the reader that dial clocks are better than digital. <b>OR</b> Student generally discusses one of the arguments that the author uses to try to convince the reader that dial clocks are better than digital.
1	Student demonstrates minimal understanding (e.g., student provides limited discussion about clocks or one of the arguments the author uses to try to convince the reader that dial clocks are better than digital).
0	Student's response is totally incorrect or irrelevant.
Blank	No student response.

### **Some of the arguments the author uses to try to convince the reader that dial clocks are better than digital:**

- Following directions of clockwise and counterclockwise
- Defining north pole and south pole
- Describing location (i.e., object at five o'clock)
- Giving logic to Sumerians' 60-minute measurement of time
- Showing time as space

*Memory: Magic through Association*

16. The title, “Memory: Magic through Association,” suggests that
- ☐ magic is needed to remember information.
  - ☐ memory appears and disappears.
  - ☒ association can make memorizing easy and fun.
  - ☐ only magicians have good memories.

**Primary Academic Expectation:** 1.2 “Students make sense of the variety of materials they read.”

**Primary Core Content Code:** 4.0.008 “Make predictions, draw conclusions, and make generalizations about what is read.”

Percentage of test takers who answered this item correctly in 2000: 75

17. The five sections of this article are set off by statements written in large, italicized letters. What is the **best** reason for this?
- ☐ The statements are not sentences.
  - ☐ The statements provide examples of reading techniques.
  - ☐ Each statement summarizes what has been said up to that point.
  - ☒ Each statement gives the main idea of the following section.

**Primary Academic Expectation:** 1.2 “Students make sense of the variety of materials they read.”

**Primary Core Content Code:** 4.0.013 “Explain how organizational patterns and/or text features (e.g., pictures, charts, graphs, format) relate to the content of a practical/workplace passage.”

**Secondary Academic Expectation:** 1.2 “Students make sense of the variety of materials they read.”

**Secondary Core Content Code:** 4.0.008 “Make predictions, draw conclusions, and make generalizations about what is read.”

Percentage of test takers who answered this item correctly in 2000: 70



18. The main point of the section “*Go for Understanding*” is to
- ☐ learn the game of baseball.
  - ☐ talk to your friends.
  - ☒ understand the information before you try to memorize it.
  - ☐ understand the rules of a game before you try to play it.

**Primary Academic Expectation:** 1.2 “Students make sense of the variety of materials they read.”

**Primary Core Content Code:** 4.0.008 “Make predictions, draw conclusions, and make generalizations about what is read.”

Percentage of test takers who answered this item correctly in 2000: 83

19. What does the author say might be a good memory trap to set?
- ☐ a written note
  - ☐ a coin in your shoe
  - ☐ a mousetrap
  - ☒ a string on your finger

**Primary Academic Expectation:** 1.2 “Students make sense of the variety of materials they read.”

**Primary Core Content Code:** 4.0.011 “Locate and apply information for a specific purpose (e.g., following directions, completing a task).”

Percentage of test takers who answered this item correctly in 2000: 84

20. The author offers many useful methods to remember information.
- Identify **three** methods from the article that can be used to remember information.
  - Explain how **each** of these methods can help you to improve your memory.

**Primary Academic Expectation:** 1.2 “Students make sense of the variety of materials they read.”

**Primary Core Content Code:** 4.0.011 “Locate and apply information for a specific purpose (e.g., following directions, completing a task).”

**Secondary Academic Expectation:** 1.2 “Students make sense of the variety of materials they read.”

**Secondary Core Content Code:** 4.0.009 “Reflect on and evaluate what is read.”

Percentage of test takers in 2000 who received

a score of 4: 7

a score of 3: 25

a score of 2: 50

a score of 1: 14

a score of 0: 2

Percentage of blank responses: 1

## *Memory: Magic through Association*

### **Scoring Guide**

SCORE	DESCRIPTION
4	Student identifies three methods from the article that can be used to remember information and clearly explains how each of the methods can help to improve memory.
3	Student identifies three methods from the article that can be used to remember information and generally explains how each of these methods can help to improve memory. <b>OR</b> Student identifies two methods from the article that can be used to remember information and clearly explains how each of these methods can help to improve memory.
2	Student identifies three methods from the article that can be used to remember information with no explanation of how they can help to improve memory. <b>OR</b> Student identifies two methods from the article that can be used to remember information and gives a limited explanation of how each of these methods can help to improve memory. <b>OR</b> Student identifies one method from the article that can be used to remember information and generally explains how this method can help to improve memory.
1	Student demonstrates minimal understanding (e.g., student identifies one method from the article that can be used to remember information with limited or no explanation).
0	Student's response is totally incorrect or irrelevant.
Blank	No student response.

### **Methods:**

- Connect the material to your interests (make associations with what you know).
- Go for understanding.
- Use mnemonics.
- Set a memory trap.
- Use acronyms.

# SCORING INFORMATION FOR SCIENCE

For each multiple-choice question, this section provides the correct answer, the Academic Expectation(s) and Code(s) from the Core Content for Assessment that the question addresses, and the percentage of test takers who answered the item correctly. For each open-response question, this section provides the Academic Expectation(s) and Code(s) from the Core Content for Assessment that the question addresses, the percentage of test takers who scored at each score point, and a scoring guide describing expectations for performance at each score point.

1. Color, volume, and density are
- ☐ properties of solids and liquids only.
  - ☐ chemical properties.
  - ☐ properties of solids only.
  - ☒ physical properties.

**Primary Academic Expectation:** 2.5 “Students understand that under certain conditions nature tends to remain the same or move toward a balance.”

**Primary Core Content Code:** 1.1.001 “A substance has characteristic physical properties (e.g., density, boiling point, solubility) that are independent of the amount of the sample. A mixture of substances often can be separated into the original substances by using one or more of these characteristic physical properties.”

Percentage of test takers who answered this item correctly in 2002: 45

2. An earthquake occurs when the tectonic plates below Earth's surface suddenly shift. These shifts of the tectonic plates are caused by
- ☐ movements in Earth's core.
  - ☒ movements in Earth's mantle.
  - ☐ deposition of sediments.
  - ☐ eruption of volcanoes.

**Primary Academic Expectation:** 2.2 "Students identify, analyze, and use patterns such as cycles and trends to understand past and present events and predict possible future events."

**Primary Core Content Code:** 2.1.001 "The Earth is layered. The lithosphere is the thin crust of the Earth. Lithospheric plates move slowly in response to movements in the mantle. There is a dense core at the center of the Earth."

**Secondary Academic Expectation:** 2.6 "Students understand how living and nonliving things change over time and the factors that influence the changes."

**Secondary Core Content Code:** 2.1.001 "The Earth is layered. The lithosphere is the thin crust of the Earth. Lithospheric plates move slowly in response to movements in the mantle. There is a dense core at the center of the Earth."

Percentage of test takers who answered this item correctly in 2002: 54

3. We get energy from the food we eat. The energy in the food first comes from the
- ☐ soil.
  - ☐ fertilizers used by farmers.
  - ☒ sun.
  - ☐ vitamins added by food manufacturers.

**Primary Academic Expectation:** 2.3 “Students identify and analyze systems and the ways their components work together or affect each other.”

**Primary Core Content Code:** 3.5.003 “For most ecosystems, the major source of energy is sunlight. Energy entering ecosystems as sunlight is transferred by producers into chemical energy through photosynthesis. That energy then passes from organism to organism in food webs.”

**Secondary Academic Expectation:** 2.3 “Students identify and analyze systems and the ways their components work together or affect each other.”

**Secondary Core Content Code:** 2.3.004 “The Sun is the major source of energy for Earth. The water cycle, winds, ocean currents, and growth of plants are affected by the Sun’s energy. Seasons result from variations in the amount of the Sun’s energy hitting Earth’s surface.”

Percentage of test takers who answered this item correctly in 2002: 58

## *Newton's Laws of Motion*

4. The brakes on a truck fail as it approaches a car stopped at a red light. Use Newton's first two laws of motion to explain what will happen when the truck collides with the car.

### **Newton's Laws of Motion**

**1st Law:** An object will stay in place until it is pushed or pulled; an object that is moving will keep moving in a straight line until it is pushed or pulled to change its speed and/or direction.

**2nd Law:** The more an object is pushed or pulled, the faster its speed and/or direction changes; the more massive an object is, the more resistance it has to change its speed and/or direction.

**Primary Academic Expectation:** 2.2 "Students identify, analyze, and use patterns such as cycles and trends to understand past and present events and predict possible future events."

**Primary Core Content Code:** 1.2.003 "When an unbalanced force acts on an object, the change in speed and/or direction depends on the size and direction of the force."

**Secondary Academic Expectation:** 2.2 "Students identify, analyze, and use patterns such as cycles and trends to understand past and present events and predict possible future events."

**Secondary Core Content Code:** 1.2.002 "An object remains at rest or maintains a constant speed and direction of motion unless an unbalanced force acts on it."

Percentage of test takers in 2003 who received

- a score of 4: 1
- a score of 3: 6
- a score of 2: 28
- a score of 1: 42
- a score of 0: 21

Percentage of blank responses: 2

## *Newton's Laws of Motion*

### **Scoring Guide**

SCORE	DESCRIPTION
4	Using both of Newton's Laws of Motion, student clearly explains what will happen when the truck collides with the car.
3	Using both of Newton's Laws of Motion, student generally explains what will happen when the truck collides with the car.
2	Using both of Newton's Laws of Motion, student gives a limited explanation of what will happen when the truck collides with the car. <b>OR</b> Using one of Newton's Laws of Motion, student generally explains what will happen when the truck collides with the car.
1	Student demonstrates minimal understanding (e.g., student explains what will happen when the truck collides with the car but does not relate to Newton's Laws of Motion).
0	Student's response is totally incorrect or irrelevant.
Blank	No student response.

#### **Answer Information:**

**Newton's 1<sup>st</sup> Law of Motion:** The car will remain at rest until the truck hits it, and the truck will keep going until it hits the car.

**Newton's 2<sup>nd</sup> Law of Motion:** The effect of the collision on the car and truck would depend on their relative masses. Since the truck has greater mass than the car, it will not stop immediately when it hits the car, but it will slow down, and/or change direction depending on the angle of the impact. The car at rest will be set in motion by the force of the truck.



## *Changes in Landforms*

5. Scientists have evidence that the landforms we see on Earth, such as mountains, islands, and canyons, as well as the shapes of continents, are the result of constructive and destructive forces at work over a long period of time.

Describe in detail **two** pieces of evidence that show that landforms on Earth are constantly changing. Provide a specific example for each piece of evidence.

**Primary Academic Expectation:** 2.6 “Students understand how living and nonliving things change over time and the factors that influence the changes.”

**Primary Core Content Code:** 2.1.002 “Landforms are a result of a combination of constructive and destructive forces. Constructive forces include crustal deformation, volcanic eruption, and deposition of sediment, while destructive forces include weathering and erosion.”

**Secondary Academic Expectation:** 2.6 “Students understand how living and nonliving things change over time and the factors that influence the changes.”

**Secondary Core Content Code:** 2.2.001 “The Earth’s processes we see today, including erosion, movement of lithospheric plates, and changes in atmospheric composition, are similar to those that occurred in the past. Earth’s history is also influenced by occasional catastrophes such as the impact of an asteroid or comet.”

Percentage of test takers in 2003 who received

a score of 4: 6

a score of 3: 15

a score of 2: 32

a score of 1: 27

a score of 0: 15

Percentage of blank responses: 5

## *Changes in Landforms*

### **Scoring Guide**

SCORE	DESCRIPTION
4	Student clearly describes, in detail, two pieces of evidence that show that landforms on Earth are constantly changing. A specific example is given for each piece of evidence.
3	Student generally describes two pieces of evidence that show that landforms on Earth are constantly changing. A specific example is given for at least one piece of evidence.
2	Student provides a limited description of two pieces of evidence that show that landforms on Earth are constantly changing. Examples may or may not be given. <b>OR</b> Student generally describes one piece of evidence that shows that landforms on Earth are constantly changing. A specific example is given for this piece of evidence.
1	Student demonstrates minimal understanding (e.g., student provides a limited description of one piece of evidence that shows that landforms on earth are constantly changing, <b>or</b> student names an example of a specific landform or type of landform that changes but does not describe how this provides evidence that landforms on earth are constantly changing).
0	Student's response is totally incorrect or irrelevant.
Blank	No student response.

**Note:** The question asks for evidence that landforms are constantly changing. It does not distinguish between slow change over time and rapid change—either is acceptable.

**Examples of evidence that shows that landforms on Earth are constantly changing (and some specific examples of the evidence):**

- Shapes of continents “fitting” from Pangea breakup (shape of Africa fits with shape of South America)
- Fossil distribution of same species across continents as evidence of plate movement (similar dinosaurs existed on several continents)
- Mountain building as a result of plate movement pressures — different ages of mountain ranges as shown by erosion shapes (old Appalachians vs. young Rockies) — uplift measured by modern satellites (such as change in height of Mt. Everest, rise of Santa Monica Mountains by over a foot in Northridge earthquake)
- Tectonic activity at plate boundaries (the “Ring of Fire” in the Pacific)
- New surface created by lava flows from active volcanoes (many examples, also historical ones such as Vesuvius burying Pompeii)
- New volcanic island formation (such as near Iceland)
- Water erosion resulting in river delta formation (Mississippi), canyon formation (Grand Canyon), changes in the course of rivers (many examples including rivers in KY), and cave formation (Mammoth Caves, including recent changes as well as former)
- Wind-caused sand dune movement (Sahara Desert changes, White Sands dunes), natural arch formation in deserts (in Utah and Arizona), and by water and wind at Natural Bridge, etc.
- Magnetic variations found along the sea floor (magnetic striping, polar reversals along mid-ocean ridges)

Many alternative specific examples can be cited.

### *Extinction*

6. A species may become extinct if environmental changes occur and the species does not adapt quickly enough to the changes.
  - a. Identify an environmental change that might cause a species to become extinct **and** identify a species that would likely be affected by such a change.
  - b. Describe how extinction of one species can affect other organisms in the ecosystem.

**Primary Academic Expectation:** 2.6 “Students understand how living and nonliving things change over time and the factors that influence the changes.”

**Primary Core Content Code:** 3.4.002 “Extinction of a species occurs when the environment changes and the adaptive characteristics of a species are insufficient to allow its survival. Extinction of species is common; most of the species that have lived on Earth no longer exist.”

Percentage of test takers in 2003 who received

a score of 4: 7

a score of 3: 21

a score of 2: 38

a score of 1: 20

a score of 0: 12

Percentage of blank responses: 2

## *Extinction*

### Scoring Guide

SCORE	DESCRIPTION
4	Student identifies an environmental change that might cause a species to become extinct and a species that would likely be affected by such a change. Student clearly describes how extinction of one species can affect other organisms in the ecosystem.
3	Student identifies an environmental change that might cause a species to become extinct and a species that would likely be affected by such a change. Student generally describes how extinction of one species can affect other organism(s) in the ecosystem.
2	Student identifies an environmental change that might cause a species to become extinct and a species that would likely be affected by such a change. Response to part b is incorrect or missing. <b>OR</b> Student identifies an environmental change that might cause a species to become extinct, but fails to identify a species that would be affected. Student provides a limited description of how the extinction of one species can affect other organism(s) in an ecosystem. <b>OR</b> Student generally describes how extinction of one species can affect other organisms in the ecosystem. Response to part a is incorrect or missing.
1	Student demonstrates minimal understanding (e.g., student identifies an environmental change that might cause a species to become extinct or identifies a species that could be affected by an environmental change).
0	Student's response is totally incorrect or irrelevant.
Blank	No student response.

#### Notes:

- Because the question specifies species extinction, answers that focus on a change in the environment of an individual organism are not acceptable.
- The species described in part b does not have to be the same as that named in part a.

**Answer Information:**

**Part a** – Environmental changes involve human destruction of habitat by development or agriculture (e.g., destruction of rainforest, other forests) and many species particular to a habitat could be named. Two examples are the reduction in quality and quantity of habitat of cheetahs or tigers.

Environmental changes could be induced by catastrophic events such as asteroid impact, volcanoes, oil spills, etc. that destroy habitat. Other natural changes may involve weather or climate changes, including global warming, extensive flooding, melting of glaciers or polar ice caps, etc. Other changes are induced by the introduction of non-native competitive species that compete too effectively for resources. Over-exploitation by humans (e.g., fishing for cod or salmon, hunting for whales) could also be considered a change in the environment. Pollution, such as acid rain, could also cause extinction of species that cannot adapt quickly or move to less polluted environments.

**Part b** – Extinction of a species can interrupt the natural food chain or web by removing either prey (such as a mouse) or a predator (such as an owl). If a producer (e.g., some type of bush or plant) becomes extinct, this affects the entire food system that depended on that species for food.

# SCORING INFORMATION FOR WRITING

For each open-response question, this section provides the Academic Expectation(s) and Code(s) from the Core Content for Assessment that the question addresses, the percentage of test takers who scored at each score point, and a scoring guide describing performance at each score point.

## WRITING TASK 4

### SITUATION:

Not only do games have rules, but there are also rules of respect and safety at home and at school. These rules help everyone understand what to do, how and when to do the activities, and how to be safe. Think of a time that you needed to know the rules for an activity. What happened? Why were the rules important? Could someone else learn from your experience? Your school newspaper is running a series of first-person articles about lessons students have learned.

### WRITING TASK:

In an article for your school newspaper, tell about a time when knowing the rules was important.

**Academic Expectation:** 1.11 “Students write using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.”

**Core Content Code:** 1.4 “*Transactive writing* is informative/persuasive writing that presents ideas and information for authentic audiences to accomplish realistic purposes like those students will encounter in their lives.”

**On-Demand Category:** Narrate

Percentage of test takers in 2003 who achieved a performance level

of distinguished:	<1
of proficient:	4
of apprentice:	62
of novice:	34
of novice non-performance:	<1

## WRITING TASK 11

### SITUATION:

A Crayola museum? A Cockroach Hall of Fame? A museum to honor the Tooth Fairy? All of these are real museums in the United States that display unusual items. Think of an object that you would like to see honored with its own museum.

### WRITING TASK:

Write a letter to convince the editor of *Interesting Museums Magazine* that your selection would be of interest to museum visitors. Include information about some items that might be displayed in this unusual museum.

**Academic Expectation:** 1.11 “Students write using appropriate forms, conventions, and styles to communicate ideas and information to different audiences for different purposes.”

**Core Content Code:** 1.4 “*Transactive writing* is informative/persuasive writing that presents ideas and information for authentic audiences to accomplish realistic purposes like those students will encounter in their lives.”

**On-Demand Category:** Persuade

Percentage of test takers in 2003 who achieved a performance level

of distinguished:	0
of proficient:	4
of apprentice:	49
of novice:	46
of novice non-performance:	1